AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A local assurance management device (D) for a network element (NE) in a communication network (N) equipped with a network management system (NMS), where said equipment element (NE) presents a chosen configuration and includes means (MM) for the measurement of parameter values in the network, and a built-in management information base (MIB) used to store management data which are representative of said measured values, characterized in that it includes management means (MAE) which are arranged to adapt the configuration of said equipment element (NE) according to at least said management data stored in said management information base (MIB), and chosen rules, known as assurance rules, defining a local assurance policy, where said adaptation ~~consists of~~comprises a change to a measurement policy parameter and/or a change to a report transmission policy to said network management system (NMS).

2. (Original) A device according to claim 1, characterized in that said management means (MAE) are arranged so as to adapt said configuration in according to information data coming from at least one other network element (NE).

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3.   (Currently Amended) A device according to claim 1, characterized in that said

adaptation ~~consists of~~comprises a change to its method of operation.

4.   (Original) A device according to claim 1, characterized in that said management

means (MAE) include analysis means (SM1) arranged so as to determine, in accordance with

certain of said chosen assurance rules, information data representing the changes in time, over a

chosen interval, of parameter values in the network stored in said management information base

(MIB).

5.   (Original) A device according to claim 4, characterized in that said analysis

means (SM1) are arranged so as to deliver information data representing a trend analysis and/or

an analysis of profiles or signatures and/or an analysis of discontinuity and/or an aggregation of

network parameter values.

6.   (Original) A device according to claim 4, characterized in that said analysis

means (SM1) are configurable.

7.   (Original) A device according to claim 6, characterized in that said analysis

means (SM1) are arranged so as perform fresh calculations relating to the network parameters

received from said network management system (NMS).

8. (Original) A device according to claim 1, characterized in that said management means (MAE) include alarm means (SM2) able to trigger the sending of an alarm and/or of information data to said network management system (NMS) and/or to at least one other network element (NE), in accordance with certain of said chosen assurance rules.

9. (Original) A device according to claim 8, characterized in that said alarm means (SM2) are configurable.

10. (Original) A device according to claim 8, characterized in that said information data and said alarms are representative of the results of analyses performed by said analysis means (SM1), and/or of data aggregation, effected by said analysis means (SM1), and/or of a network parameter value stored in said management information base (MIB).

11. (Original) A device according to claim 1, characterized in that said management means (MAE) include network observation means (SM3) defining a flow measurement agent of the end-to-end type, arranged so as to determine information data which are representative of said flow of the end-to-end type in accordance with certain of said chosen assurance rules.

12. A device according to claim 11, characterized in that said network observation means (SM3) are configurable.

13.   (Original) A device according to claim 1, characterized in that said management means (MAE) include means for the management of service level agreements or SLAs (SM4), arranged so as to determine information data representing said agreement management in accordance with certain of said chosen assurance rules.

14.   (Original) A device according to claim 13, characterized in that said service level agreement management means (SM4) are configurable.

15.   (Original) A device according to claim 2, characterized in that said management means (MAE) include monitoring means (SM5) which are able to manage the operation of said analysis means (SM1), of said alarm means (SM2), of said network observation means (SM3) and of the service level agreement management means (SM4), in accordance with at least some of said chosen assurance rules.

16.   (Original) A device according to claim 15, characterized in that said monitoring means (SM5) are supplied with information data by said analysis means (SM1) and/or said network observation means (SM3) and/or the service level agreement management means (SM4), and are arranged so as to order said alarm means (SM2) to generate alarms and/or reports in the event of detecting non-compliance with an assurance rule by received the information data.

17.   (Original) A device according to claim 15, characterized in that said monitoring means (SM5) are arranged in the form of a rule engine storing said chosen assurance rules.

18.   (Original) A device according to claim 15, characterized in that said monitoring means (SM5) are configurable.

19.   (Original) A device according to claim 1, characterized in that said management means (MAE) are capable of being configured by said network management system (NMS) via an application programming interface (API) of said equipment element (NE).

20.   (Original) A device according to claim 1, characterized in that said management means (MAE) are capable of being configured by said network management system (NMS) via an application programming interface (API) of said equipment element (NE) and via said management information base (MIB).

21.   (Original) A device according to claim 19, characterized in that said analysis means (SM1) and/or said alarm means (SM2) and/or said network observation means (SM3) and/or said monitoring means (SM5) and/or the service level agreement management means (SM4) are capable of being configured by said network management system (NMS), via said application programming interface (API).

22. (Original) A device according to claim 20, characterized in that said analysis means (SM1) and/or said alarm means (SM2) and/or said network observation means (SM3) and/or said monitoring means (SM5) and/or the service level agreement management means (SM4) are capable of being configured by said network management system (NMS), via said application programming interface (API) and via said management information base (MIB).

23. (Original) A device according to claim 1, characterized in that said management means (MAE) are capable of being configured by said network management system (NMS) using dedicated commands.

24. (Original) A device according to claim 23, characterized in that said analysis means (SM1) and/or said alarm means (SM2) and/or said network observation means (SM3) and/or said service level agreement management means (SM4) and/or said monitoring means (SM5) are arranged so as to be capable of being configured by said network management system (NMS) using dedicated commands.

25. (Original) A device according to claim 23, characterized in that said commands are of the "Command Line Interface" type.

26. (Currently Amended) A network element (NE) for a communication network (N) equipped with a network management system (NMS), where said equipment element (NE)

presents a chosen configuration and including means (MM) for the measurement of parameter values in the network and a management information base (MIB) capable of storing management data representing said measured values, characterized in that it includes a device or arrangement (D) in accordance with ~~one of the preceding claims~~claim 1.

27.   (Original) An equipment element in accordance with claim 26, characterized in that it includes an application programming interface (API), and in that said management information base (MIB) is capable of being configured by said network management system (NMS) via said application programming interface (API).

28.   (Original) An equipment element in accordance with claim 26, characterized in that it includes an application programming interface (API), and in that said management information base (MIB) is capable of being programmed by said network management system (NMS) via said application programming interface (API).

29.   (Original) An equipment element in accordance with claim 26, characterized in that it is chosen from a group which includes at least the routers, the switches and the firewalls.

30.   (Original) A communication network (N), containing a network management system (NMS), characterized in that it includes a large variety of network equipment (NE) in accordance with claim 26.

31.   (Original) A network in accordance with claim 30, characterized in that each equipment element (NE) is arranged to deliver alarms and/or information data of various types to said network management system (NMS).

32.   (Currently Amended) Use of the device or arrangement, the equipment element, and communication network, in accordance with ~~any one of the preceding claims~~claim 1, in the network technologies needing to be managed.

33.   (Currently Amended) Use in accordance with claim 32, characterized in that said network technologies are chosen from a group which includes transmission networks, in particular of the WDM, SONET and SDH type, management networks, in particular of the Internet-IP and ATM type, and speech networks, in particular of the conventional, mobile and NGN type.